



# healthy eating in out-of-school time

The Promise and the Challenge

by Jean L. Wiecha, Georgia Hall, Ellen Gannett, and Barbara Roth

More than 30 percent of American children are either overweight or obese (Ogden, Carroll, Curtin, Lamb, & Flegal, 2010), with a body mass index (BMI) in the 85th percentile or above. Although prevalence varies by age, sex, and ethnicity, all groups are affected (Ogden et al., 2010).

Risk of serious health problems increases with increasing BMI. Childhood obesity, characterized by BMI in the 95th percentile or above, affects 16.9 percent of two- to nineteen-year-olds; it is associated with increased risk of high blood pressure, high cholesterol, and type 2 diabetes (Barlow, 2007). Childhood obesity also increases the risk of obesity and chronic disease during adulthood (Whitaker, Wright, Pepe, Seidel, & Dietz, 1997).

Specific childhood dietary practices promote healthy weights and help reduce chronic disease risk. These include reducing intake of sugar-sweetened beverages (James, Thomas, Cavan, & Kerr, 2004; Ludwig, Peterson, & Gortmaker, 2001) and foods containing trans fats, added sugar, and refined grains (U.S. Department of Agriculture & U.S. Department of Health

The co-authors, founders of the Healthy Out-of-School Time (HOST) Coalition, worked with the coalition to develop voluntary OST standards for healthy eating and physical activity. These standards were adopted by the National Afterschool Association in 2011.

**JEAN L. WIECHA**, Ph.D., is an associate professor of exercise and health sciences at the University of Massachusetts Boston. She directs GoKids Boston, a youth fitness and research center providing OST programming. She was co-principal investigator on the Robert Wood Johnson Foundation (RWJF) grant that sponsored this work.

**GEORGIA HALL**, Ph.D., is a senior research scientist at the National Institute on Out-of-School Time (NIOST) at Wellesley Centers for Women, Wellesley College, and managing editor of *Afterschool Matters*. She was principal investigator on the RWJF grant.

**ELLEN GANNETT**, M.Ed., is the director of NIOST. She was a senior project advisor on the RWJF project. Celebrating her 30th year with NIOST, Ellen works on issues ranges from system building for afterschool and youth development programs to professional development and evaluation systems.

**BARBARA ROTH**, M.A., is national director for youth and family programs for the YMCA of the USA. In this role, she supports the nation's local YMCAs in strengthening families and supporting holistic development of children and youth. Barbara has more than 35 years of experience in the field. She is currently on the board of directors of the National Afterschool Association and was a senior advisor on the RWJF project.

and Human Services, 2010). The American Academy of Pediatrics recommends that children eat a healthy breakfast and five or more fruits and vegetables daily. Other recommendations include letting children regulate their own intake and engaging the whole family in healthy habits (Barlow, 2007).

Every organization that feeds children can employ these dietary strategies. Out-of-school time (OST) programs, which serve over 8 million children per year (Afterschool Alliance, 2009), are a promising setting for nurturing healthy eating habits. Children may be in programs for 15 or more hours per week during the school year and all day in the summer. Most programs provide at least one snack or meal and strive for positive role modeling (National AfterSchool Association, 1998). Environmental interventions that limit food choices to healthy options show promise in general and specifically in OST (Mozaffarian et al., 2010; Story, Kaphingst, Robinson-O'Brien, & Glanz, 2008). While the quality of foods and beverages served nationally in OST programs is unknown, limited research (Mozaffarian et al., 2010) and our field experience suggest wide variability.

OST program menus may reflect voluntary quality standards or standards set by public agencies. For example, programs that serve children from low-income families may provide snacks or meals through the USDA's Child and Adult Care Food Program or Summer Meals Program. Meals funded by these programs must meet federal menu guidelines. Some programs serve snacks or meals provided through the National School Lunch Program in their school district. Other programs follow menu guidelines from non-regulatory bodies such as the YMCA, California CANFIT, and Alliance for a Healthier Generation. An unknown number of OST programs operate with no menu guidelines at all.

The patchwork system of nutrition guidelines may contribute to variable OST menu quality. An essential first step in determining how to address this issue involves understanding the perspectives of individuals who manage key OST organizations. We used qualitative research methods to explore healthy eating concepts among OST program administrators. We examined their perception of the importance of the childhood obesity epidemic in relation to their mission. We also explored perceived barriers to serving healthful foods and the potential utility of

guidelines and other managerial supports in helping programs adopt healthy eating practices.

## Methods

The research team, consisting of the authors, developed a semi-structured interview to identify the factors affecting healthy eating and physical activity in OST. The interview included 13 guiding questions. We consolidated responses to these questions under four headings:

1. Where do childhood obesity, physical activity, and healthy eating fit into the agenda and priorities for OST programs in your community, city, region, or network of organizations?
2. What are the barriers that OST programs face in achieving their goals for healthy eating?
3. Describe the standards and guidelines for healthy eating used in the OST programs in your community, city, region, or network. Would more rigorous and specific guidelines be likely to improve practices?
4. What supports—management, staffing, guidelines, communication, training, financial resources, other infrastructure—need to be in place or would have to change to support healthy eating practices?

We then identified 17 key OST organizations that provide, coordinate, or improve services or that conduct policy or advocacy work on behalf of large provider networks. We selected interviewees purposefully rather than trying to identify a representative sample because we wanted to include prominent organizations with major accomplishments. Individuals from 14 organizations contributed the comments about healthy eating included in this analysis. All interview participants were senior staff, including unit or program managers, directors, and executives. The organizations were statewide (n=4); regional (n=6) covering a major metropolitan area, county, or counties; or national (n=4) in scope. They were either governmental (n=5) or private nonprofit (n=9) entities. Two organizations had more than one interview participant. Each participant gave verbal consent to the interview protocol, which had been approved by the institutional review boards at Wellesley College and the University of Massachusetts Boston.

All four of us conducted phone interviews in spring 2010. Each interview lasted 30–60 minutes. Not all par-

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ticipants responded to every question. The interviews were digitally recorded and then transcribed.

We analyzed interview transcripts thematically using techniques described by Taylor-Powell and Renner (2003). Two members of the research team reviewed and coded interview transcripts to organize segments under headings related to the interview prompts. When the interviewers' coding did not match, we maintained the transcript fragment under multiple headings until the next phase of the analysis identified its best placement. We then parsed these segments into smaller fragments of one to several sentences on a single theme. Themes were not determined a priori but were allowed to emerge from the text. A theme mentioned by a participant in response to a specific question was counted once regardless of the number of occurrences. For example, if "more training" appeared five times in one response, we tallied only one occurrence.

### **Leaders' Perceptions of Healthy Eating in OST**

Our presentation of the interview comments corresponds to our four broad-based questions. We maintain our respondents' anonymity, identifying them by the geographic scope of their organization's work and by organization type.

#### **Priority of Healthy Eating**

Respondents were highly concerned about childhood obesity. They identified physical activity and healthy eating as important components of their work. Among 12 organizations commenting on this topic, one interviewee described these issues as the organization's top priority, and two reported they were the second highest priority after school and academic issues. Of the remaining nine, four stated these issues were among their organization's top three to five priorities, and five simply described them as a "high" priority.

#### **Barriers**

Participants identified many barriers to serving healthy foods and beverages in OST. In comments from participants representing 13 organizations, four themes related to program management emerged: food procurement, budget, staff issues, and facilities. Please note that these interviews predate the Healthy, Hunger-Free Kids Act of 2010, which includes provisions to improve snack quality.

#### **Procurement**

How programs get their food is an important determinant of what they serve. Two main models emerged from the interviews. Some programs received snack foods through

the school food service as part of the National School Lunch Program (NSLP), while others purchased their own food. Of the programs purchasing food, some went shopping or took delivery from a food vendor. Some participated in the Child and Adult Care Food Program (CACFP) for low-income communities, which reimburses programs for foods that meet CACFP guidelines.

Interviewees from seven organizations described benefits and challenges associated with each procurement model. Participants who described programs that get snacks from the school food service noted that the program, as a statewide nonprofit provider put it, "has no control over" what comes in. New menu guidelines could be particularly challenging for these programs to implement. One interviewee from a statewide nonprofit organization pointed out that programs can petition their local NSLP for different food items, "but most people don't want to take the initiative." Another interviewee, from a regional government agency, noted that school food service directors are required to keep costs down: "I think that sometimes their business is to ensure guidelines are met, but to do it as [inexpensively] as possible." Improving menus for OST programs that get their food from NSLP may require advocacy from OST to school food service and from school food service to vendors.

Programs that purchase their own food have more choice but may face difficulties with devoting staff time to shopping and with balancing cost and healthfulness. A participant from a national nonprofit organization that used menu guidelines said, "Many of the programs... struggled with the menu.... They ended up having to go on [big-box store] runs; it wasn't easy for them." Also, several participants described problems with access to healthy food. A regional service provider noted, "In low-income communities, a lot of the markets...don't have a spectrum of fresh fruits and vegetables." The absence of supermarkets providing fresh food at competitive prices affects not only the program's menu but also the choices available to participating families. An interviewee from another regional nonprofit organization described the difficulty of finding alternative vendors: "To get fresh fruits and vegetables delivered by a wholesale food center was very challenging.... I was turned down many times [but finally found someone]."

CACFP participants can receive reimbursement for snacks that meet a prescribed food pattern. Although interviewees viewed CACFP as an important resource, four identified problems with using it. Said a respondent from a regional government agency, "[We] never receive full reimbursement for what it costs.... We have to work

so stringently with the food service company to keep the cost down. The [CACFP] guidelines need to be adjusted or really re-evaluated." At the time of these interviews, reimbursement was capped at 74 cents per child per day. Two interviewees noted that CACFP paperwork was difficult for small programs to keep up with. One said that many OST providers don't know enough about CACFP and that it could help many more programs.

### Budget

Interviewees from eleven organizations commented on the cost of healthful food. While one noted that many menu improvements can be made without more money, the other ten comments indicated strong concerns about costs. One provider's comment was typical: "You are going to get the cheapest thing you can get. If you don't have a whole lot of money, you're not going to spend a lot. Typically, if the kids don't take the fruits and vegetables, their shelf life isn't going to be very long." Additional empirical data are needed to address the widespread concern that healthful menus are more expensive than mixed- or low-quality menus.

### Staff Issues

Five interviewees commented on staff issues. All agreed that program staff are responsible for actual implementation, so that their ability and motivation to carry out any menu policy changes requires careful consideration. Noting that staff turnover complicates improvement efforts, one interviewee from a national nonprofit organization said that programs need to "pay people what they deserve" in order to improve staff retention. This interviewee further commented that programs need "a combination of education, commitment, and dollars" as well as "holding up the examples that are successful and continuing to just pound away at it." Ongoing executive support and boosting nutrition knowledge and competency were also cited.

### Facilities

Participants from three organizations voiced concern about access to kitchen facilities among OST programs in schools. Wholesome food is generally perishable.

Commented one respondent from a regional nonprofit organization, "The barrier...is very real. You need a partnership with [the school cafeteria] so they ... have access to a refrigerator and running water." Programs that do not have shared-use agreements with schools may have difficulty including fresh fruits and vegetables in their menus. It is not clear how widespread this problem may be.

### Standards and Guidelines

Participants from 12 organizations commented on our question on existing standards and whether new guidelines would improve OST food choices. Interviewees were familiar with prominent national guidelines. They specifically mentioned the two main USDA programs that influence snacks in OST: CACFP and NSLP. Further mention was made of the Institute of Medicine's recent nutrition guidelines for schools (Stallings, Suitor, & Taylor, 2010). Others discussed state licensing requirements and organization-specific standards. Several respondents were engaged in developing snack-menu guidelines for their own organization or public network.

Interviewees discussed benefits and potential pitfalls of having more rigorous and specific guidelines. Many respondents from a range of organizations supported the idea:

- "Policy is critical."
- "You do need the guidelines and toolkit as a start."
- "National, well-publicized [guidelines], with resources and training...would be really helpful."

One respondent working at the national level went further, stating that, "We need someone to write the national recommendation so that people like me can start putting it in...policy documents to make sure people realize [these are] the standards that they should be trying to achieve."

Two interviewees noted that programs are looking to the National Afterschool Association and the Council on Accreditation for leadership on guidelines. These two organizations provide the current voluntary and accreditation standards. In this form, expectations and infrastructure already exist.

Many interview participants cautioned that guidelines were not enough to change practices. In the words

of one individual with a national perspective, “Too often people just … give folks who are on the ground trying to do the work a piece of paper, and then they don’t know what to do with it.” Participants said that structures were needed to support implementation. A representative of a national advocacy organization said, “Without additional funding or training or resources or structure to help implement them, [guidelines] wouldn’t really do much… without addressing the barriers.” Another interviewee, who had coordinated a similar process through a state agency, noted the importance of building buy-in and consensus around new rules: “We needed a lot of input from providers … at all different levels to ensure that what we…put out was something that we could all work toward.” This sentiment was echoed by a regional government agency leader, who said, “More rigorous and specific guidelines would not improve practices without support from the communities and the parents.”

Participants from three organizations commented on potential problems with more comprehensive guidelines. One person noted that vendors can charge high prices for healthful items. Another noted that mandatory nutrition standards could put programs serving needy children in a precarious situation if they lose funding due to poor compliance, which may itself reflect lack of funding, training, or opportunity: “You want to be real careful having these strict guidelines, because then you don’t have money unless you follow them.... Having the guidelines and having people understand why they are important and then having the resources for them to implement them…[is] better”. One respondent from a statewide advocacy group said plainly that “there is a real opposition to policy” in some circles, indicating that the very idea of regulating menus was objectionable to many.

### **Supports**

Our final question was, “What supports—management, staffing, guidelines, communication, training, financial resources, other infrastructure—need to be in place or would have to change to support healthy eating practices?” Five organizations commented that programs need more money. Additional needs they identified were training, incentives, and accountability structures.

**“Educate, educate, educate… We must continue to train our food service staff to purchase, to prepare, to serve healthy foods.”**

### **Training**

Training was a persistent theme throughout the interviews. Participants said that training was necessary both to improve knowledge and to promote new skills. The director of services from a government agency said, “Educate, educate, educate… We must continue to train our food service staff to purchase, to prepare, to serve healthy foods.” In all, six participants argued for more training to help with skills, motivation, and attitudes related to improving menu quality. Said one, “Training is key for staff to be comfortable.” Several respondents ad-

vised for ongoing as opposed to one-time training because of high staff turnover and because skill improvement can require mentoring over time. Noted a respondent from an organization with national scope, “Coaching, training, and mentoring really have to be re-structured…to teach afterschool people how to do healthier things.” A respondent from an organization working at the state level said,

“It would be beneficial if you… had mentors to come out and assist [staff] and coach them along the way.... I think that if there was a train-the-trainer initiative… that might be very beneficial.” One suggestion from a service provider was to ensure that training resulted in certification: “By having our staff obtain a fitness or nutrition certification, for example, we will also be gaining credibility in our programs.” Another suggestion was to ensure continuity and persistence by addressing healthy eating at every staff meeting.

### **Incentives**

Four comments mentioned incentives that would improve implementation. Three of these focused on incentives for programs, such as public recognition or use of a voluntary rating system. A regional service provider suggested developing incentives for vendors: “One of the major adjustments that would help is if the food service vending companies…could have some sort of incentive to provide healthier foods.”

### **Accountability Structures**

Several interviewees identified key accountability structures to ensure implementation. Respondents felt it was critical to monitor progress toward menu improvement. One person stated simply, “Checking for compliance is important.” Seven responses referred to supervision,



data-based program monitoring, observational monitoring, mentoring, and transparency about progress among program staff and parents of students. One of these comments advocated use of continuous quality improvement methods to maintain progress.

### Toward Healthier Food in OST

A vision for a healthier U.S. cannot be complete without OST programs. In this qualitative study, we spoke with key staff at regional, state, and national organizations that provide services to or conduct policy work with thousands of OST programs. While childhood obesity and healthy eating are high-priority concerns for these organizations, the transition to serving healthy snacks daily will require a number of inputs. We learned that, while budget was a concern, additional funding will not guarantee healthy menus. Having clear, consistent guidelines across organizations and across the country will help reduce confusion and focus efforts, but this too will not be enough. A major barrier is simply procuring healthier foods, whether through local markets, vendors, or school food service programs. Interviewees perceived CACFP, which supports healthy menus, as beneficial but offered caveats on its administrative burden and reimbursement levels. Respondents also made a strong case for ongoing, high-quality staff training. They

discussed the positive role of accountability structures and incentives, among other ideas, in promoting and sustaining improvement. Putting these pieces together requires skilled managers who can craft and sustain changes in procurement, preparation, storage, and budgeting. The emerging theme from these interviews was that healthy menu guidelines would be helpful but insufficient to trigger change.

Limitations of this qualitative study could be addressed through additional research. Observation and self-reports could assess actual menu quality and food service infrastructure in OST programs. We did not seek data on actual menus. In addition, we purposely did not define “healthy” menus, so we cannot assume that the term had identical connotations for all respondents. We felt these decisions were warranted because we were assessing perceptions of and attitudes toward the general idea of healthful diets and because of the complexity of introducing specific dietary standards during phone interviews. Another limitation is that members of our convenience sample, though it was crafted to include representatives of key OST organizations, may hold opinions that are not representative.

Despite these limitations, there are many important reasons to reflect on the readiness of OST leaders to improve menu quality. First, obesity prevention efforts, which

have largely taken place in schools during the school day, have produced only modest results, leading to new calls for research that includes community programs such as after-school (U.S. Department of Health and Human Services, 2007; Whitlock, O'Connor, Williams, Beil, & Lutz, 2010). Second, the National Afterschool Association (NAA) recently adopted new voluntary quality standards for healthy eating and physical activity (NAA, 2011). With 7,000 members, NAA has potential to broadly influence children's diets if its standards can be widely disseminated and implemented. This effort would require support from advocates and service providers at many levels. Finally, recent Congressional reauthorization of the Child Nutrition Act—the Healthy, Hunger-Free Kids Act of 2010—strengthens CACFP and NSLP to promote OST snacks and meals that are fully aligned with the 2010 Dietary Guidelines for Americans. As with NAA's standards, the new law has potential for widespread impact on children's diets if successfully implemented. A first step toward promoting effective implementation is understanding the perceptions and concerns of leaders in the field. Subsequent steps must include building dissemination strategies that are responsive to those concerns and fostering supportive training and management practices that help OST programs become leaders in preventing childhood obesity. Careful evaluation of implementation efforts will assist in identifying approaches that warrant replication.

## Acknowledgments

This research was funded by a grant to Georgia Hall from the Robert Wood Johnson Foundation through its Active Living Research program.

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